

REMARKS

Reconsideration and allowance of the application are respectfully requested.

In the Office Action of September 21, 2004, claims 1-25 were pending in the application. Claims 12-16 were allowed. Claims 6-11 were indicated as allowable if rewritten in independent form. Claims 1-5 and 17-25 were rejected under 35 U.S.C. §103(a). Those rejections, as they might apply to the claims as now amended, are respectfully traversed.

First of all, allowable dependent claim 6 has been cancelled and rewritten in independent form as new claim 26 and includes all of the limitations of base claim 1. Claim 7 has been amended to depend from claim 26. Similarly, allowable dependent claim 10 has been cancelled and rewritten in independent form as new claim 27, including all of the limitations of base claim 1. Claim 11 has been amended to depend from new claim 27. Therefore, it is believed that claims 26, 27, 7-9 and 11 now are allowable, along with previously allowed claims 12-16.

Claims 1-5 and 17-25 were rejected under 35 U.S.C. §103(a) as being unpatentable over Mahulikar 5,122,858 in view of Ross 6,214,152. Those rejections are respectfully traversed.

Specifically, as pointed out in the Specification herein, the invention is directed to solving the problems of contaminant migration from the environment into the interior cavity of electrical connectors to protect interior components, such as terminals mounted within the cavity, from harsh environments. Overmolded housings have a tendency to form potential gaps which, in turn, form potential migratory paths between the overmolded housing and the support structure of the connector, for contaminants to migrate from the environment into the interior cavity and the electrical components therein. Neither Mahulikar nor Ross are even remotely concerned with this type of problem. It can be appreciated why all of the allowed or allowable claims 10-16 are directed to protecting an interior cavity of an electrical connector assembly.

Therefore, independent claims 1 and 17 have been amended to define the support structure as specifically having an interior cavity in which electrical components can be disposed. The interface area between the molded plastic housing and the support structure is set forth as defining a potential gap which would form a potential migratory path for contaminants from the environment into the interior cavity and the electrical components therein. The compliant layer is deposited in this gap to protect the interior electrical components from contaminants migrating into the cavity between the support structure and the molded plastic housing.

New claim 28 simply is a rewriting of independent method claim 22 to include the above subject matter which was added to independent claims 1 and 17.

It is respectfully submitted that independent claims 1, 17 and 28, along with the claims which depend therefrom, are patentable over Mahulikar in view of Ross under 35 U.S.C. §103(a).

Specifically, Mahulikar is directed particularly to the concept of improving the adhesion between a molded resin and the tips of metallic leads. Mahulikar has nothing whatsoever to do with migratory paths between connector support structures and overmolded connector housings. Mahulikar specifically states that a polymer must be used which adheres to both copper and a molding resin. In one embodiment, the terminal tip is dipped in a polymer solution. In another embodiment, a polymer sheath is applied about the lead tip. In any event, the adhesion of metal terminals to plastic material has little to do with Applicants' disclosed and claimed invention of preventing contaminant migration into a connector cavity between a connector support structure and an overmolded connector housing. Clearly, independent claims 1 and 17, as now amended, as well as method claim 28 as similarly set forth, are patentable over Mahulikar in view of Ross under 35 U.S.C. §103(a).

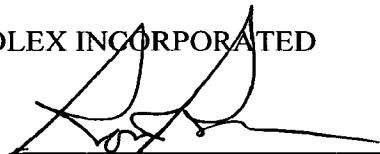
The Ross reference adds absolutely nothing to Mahulikar as regards the invention as now claimed herein. In fact, Ross is substantially identical to Mahulikar. Claim 1 of Ross reads directly on the disclosure of Mahulikar. Ross is directed to applying a heat-curable adhesive to overmolded leads of electronic packages, the adhesive adhering to both metal and plastic, just like Mahulikar. Clearly, the claims as now amended herein are patentable over Ross as a redundant teaching of Mahulikar, under 35 U.S.C. §103(a).

In view of the foregoing, reconsideration of the application, allowance of claims 1-5, 17-21, 23-25 and 28, along with allowable claims 7-16, 26 and 27, and passing the application to issue are respectfully requested.

Respectfully submitted,

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